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09/854,756	05/14/2001	Robert C. Gardiner	283_299	8889

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EXAMINER

TRAN, ELLEN C

ART UNIT	PAPER NUMBER
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2134

MAIL DATE	DELIVERY MODE
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05/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/854,756

Applicant(s)

GARDINER, ROBERT C.

Examiner

Ellen C. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 60 and 62-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60 and 62-103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

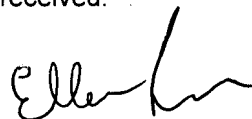
**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date Feb'07
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

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### ***DETAILED ACTION***

1. This action is responsive to communication: 20 February 2007 with acknowledgement of an original application filing date of 14 May 2001.
2. Claims 60 and 62-103 are currently pending in this application. Claims 60, 62, 80, and 93 are independent claims. Claim 60 has been amended. Claims 1-59 and 61 are cancelled. Claims 63-103 are new. Amendment to the claims is accepted.
3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 February 2007 has been entered.
4. The IDS submitted 20 February 2007 has been considered.

### ***Response to Arguments***

5. Applicant's arguments with respect to 60 and 62-103 have been considered but they are not persuasive, where noted below.

#### **Brief summary of prior art of records:**

**Nordenstam:** discloses a secure distribution method of a private key from a distributing unit to a receiving unit. Some examples of receiving units and distributing units are personal computers, mobile telephones, personal digital assistants, palmtops, smart cards, key generators, set top boxes, even devices in vehicles such as cars and motorcycles. The distributing and receiving units use a communication interface some examples are conventional communication busses,

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radio links, infrared links, wireless LAN links such as Bluetooth, links over public networks or combination thereof. See col. 6, lines 28-39.

**Nysen:** discloses an enhanced backscatter RF-ID tag reader system and multiprotocol RF tag reader system. In addition, the present invention allows the use of spread spectrum technology to receive data from backscatter tags. Further, certain interactive tags which download information from the interrogation signal may also be compatible with the technique. See col. 4, lines 62-66.

In response to applicant's argument on page 10, "According to the MPEP § 2143, three basic criteria must be met to establish a prima facie case of obviousness ... The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure". The Examiner disagrees with argument and notes *MPEP section 706.02(j) indicates 35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:*

*- the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate.*

As shown below as well in previous Office Actions Nordenstam teaches 'a secure method distribution method of a private key for a distributing to a receiving unit'

Using the broadest reasonable interpretation the Examiner equates the 'encryption key' to be equivalent to the 'private key'.

*- the difference or differences in the claim over the applied reference(s), (MPEP section 706.02(j) )*

The difference in Nordenstam from the claims is that the detailed RF signal transmission method is not disclosed, however Nordenstam teaches in col. 6, lines 33-38 "Examples of the

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communication link 3 are conventional communication busses, radio links, infrared links, wireless LAN links such as Bluetooth, links over public networks such as the so-called Internet, or combinations thereof, depending on the characteristics of the distributing and receiving units 1, 2". Therefore a modification to include detailed radio links would have been obvious to supplement the communication link.

*- the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, (MPEP section 706.02(j) )*

as stated below Nysen teaches detailed RF signal transmissions and reception.

*- an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. (MPEP section 706.02(j) )*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of '263 a method of distributing keys to include a means for the portable keying device to utilize a RF-ID tag that is compatible with existing methods. One of ordinary skill in the art would have been motivated to perform such a modification because of the many schemes known for encoding and decoding identification signals (see '671 col. 1, lines 18 et seq.). "A number of different schemes are known for encoding, transmitting and decoding identification signals from RF-ID tags. However, these schemes are generally incompatible, therefore requiring proprietary readers to accept encoded transmissions from tags of the same vendor. Even where the transmission scheme is not proprietary, there is no standardization in the various RF-ID applications". Note the Examiner interprets the existing methods to include information as to the direction of the signal, see col. 2, line 65-67.

A prima facie case of obviousness, was established, the three basic criteria have been met. First, there was a suggestion or motivation to combine Nordenstam and Nysen, as shown above. Second, there is a reasonable expectation of success. The prior art reference (or references when combined) teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

In response to applicant's argument beginning on page 11, "The standing rejection of claim 6 is representative of the Examiner's rejection of claims reciting the directional and/or angular features ... In reviewing the Examiner's grounds for rejection as to claims 6, 33, 47, and 60 applicant's note that in referencing Nysen the Examiner not established that a prior art reference alone or in combination has all of the elements of the claimed invention ... Rather, the

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relied upon section of Nysen appears to relate to the propagation of radio energy within a single radio transponder for disposal within a single device". The Examiner disagrees with argument and notes that the whole reference should be considered. It is noted, using the broadest reasonable interpretation, the Nysen invention teaches a system a radio frequency emission and receiver utilizing tags within an interrogation window. It is understood the present techniques combine various different RF-ID techniques (as explained in col. 4, lines 43-61). Furthermore Nysen teaches the phase information (i.e. direction) of the received signal is determined with the use of dipole antennas in col. 15, line 19 through col. 16, line 3.

In response to applicant's argument on page 12, "Regarding Nysen, the applicants respectfully assert that the relied upon section of Nysen does not relate to the transmission of radio signals from a sending device for receipt by a receiving device, as would be necessary for the relied upon section to bear even a colorable relationship to elements of applicant's claims. Rather, the relied upon section of Nysen appears to relate to the propagation of radio energy within a single radio transponder for disposal within a single device". The Examiner disagrees with argument and notes the transponder is part of the receiver system which is used when signals are received, see col. 2, lines 21-32 "Systems for interrogating a passive transponder employing acoustic wave devices, carrying amplitude and/or phase-encoded information are disclosed in, for example. U.S. Pat. Nos. 4,059,831; 4,484,160; 4,604,623; 4,605,929; 4,620,191; 4,623,890; 4,625,207; 4,625,208; 4,703,327; 4,724,443; 4,725,841; 4,734,698; 4,737,789; 4,737,790; 4,951,057; 5,095,240; and 5,182,570, expressly incorporated herein by reference. The tags interact with an interrogator/receiver apparatus which transmits a first signal to, and receives a second signal from the remote transponder, generally as a radio wave signal. The transponder

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thus modifies the interrogation signal and emits encoded information which is received by the interrogator/receiver apparatus”

In response to applicant’s argument beginning on page 12, “It is particularly difficult to discern the alleged relationship between the relied upon section of Nysen and the claimed invention given that the reference numerals of the relied upon section do not correspond to any drawing reference numerals of Nysen ... The reference to direction in the relied upon section of Nysen cannot reasonable be read to bear a relationship to the directional elements of applicants’ claims at least because the relied upon section of Nysen does not relate to a sending of a signal from a first device for receipt by a second device and also at least because there is no drawing corresponding to the referenced “directional” elements”. The Examiner disagrees with argument, and notes again the reference as a whole should be considered. Nysen teaches phase calculation (i.e. bearing information) with the use of transponders see col. 15, line 19 through col. 16, line 3.

***Allowable Subject Matter***

6. Claims 80-92 are allowed over the prior art of record. The following is a statement of reasons for the indication of allowable subject matter:

In interpreting the claims in light of the specification and applicant’s arguments. Examiner finds the claimed invention is patentable distinct from the prior art of record.

The prior art of record, Nordenstam in view of Nysen, fail to anticipate or render Applicant’s particular feature: (as stated in independent claims 80)

**“said predetermined format including a signal having an effective transmitting range of less than or equal to one meter, said predetermined format further including a signal being transmitted in a predetermined direction from said portable keying device; pointing said portable keying device toward said electronic**

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**terminal; performing a handshaking routine, whereby the keying device and the electronic terminal exchange handshaking messages”**

The dependent claims, being further limiting to the independent claims, defined and enabled by the Specification are also allowed.

7. Claims 72-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 60, 62-71, and 93-103** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordenstam et al. U.S. Patent No. 6,711,263 (hereinafter ‘263) in view of Nysen U.S. Patent No. 6,433,671 (hereinafter ‘671).

**As to independent claim 60, “A portable keying device for installing an encryption key into at least one electronic terminal, the portable keying device comprising:”** is taught in ‘263 col. 9, line 64 through col. 10, lines 14;



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**“a memory device for storing the at least one encryption key”** is shown in ‘263 col. 10, lines 14-18;

**“and a communications unit coupled to said memory device, the communications unit being operative to transmit said at least one data communications encryption key to an electronic terminal according to a pre-determined format”** is disclosed in ‘263 col. 10, lines 19-29;

**“said electronic terminal including a secure memory location for storing said encryption key, said pre-determined format including at least one of: ”** is taught in ‘263 col. 4, lines 24-29;

the following is not specifically taught in ‘263:

**“transmission of an RF signal at a predetermined power level of less than or equal to 1mW”** however ‘671 teaches transmitting a RF signal at a specified signal strength in col. 8, lines 53-67 {Note “power level” has the same meaning as “signal strength”};

**“transmission of an RF signal in a direction that resides within an angular range of plus or minus 15 degrees or less of a certain direction”** however ‘671 teaches “The information determined by the signal processor 32 is passed to a computer system comprising, among other elements, a random access memory (RAM) 34 and a microprocessor 36. This computer system analyzes the frequency, amplitude and phase information and makes decisions based upon this information” in col. 13, lines 33-42 and col. 15, line 19 through col. 16, line 3;

**“the transmission of an 1mW signal having a predetermined polarity”** however ‘671 teaches the direction of the received and sent signal can be controlled in col. 18, lines 6-12.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of ‘263 a method of distributing keys to include a means for the portable

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keying device to utilize a RF-ID tag that is compatible with existing methods. One of ordinary skill in the art would have been motivated to perform such a modification because of the many schemes known for encoding and decoding identification signals (see '671 col. 1, lines 18 et seq.). "A number of different schemes are known for encoding, transmitting and decoding identification signals from RF-ID tags. However, these schemes are generally incompatible, therefore requiring proprietary readers to accept encoded transmissions from tags of the same vendor. Even where the transmission scheme is not proprietary, there is no standardization in the various RF-ID applications".

**As to independent claim 62, "A portable keying device for installing an encryption key into at least one electronic terminal, the portable keying device comprising:"** is taught in '263 col. 9, line 64 through col. 10, lines 14;

**"a memory device for storing at least one encryption key"** is shown in '263 col. 10, lines 14-18;

**"and a communications unit coupled to said memory device, said communications unit being operative to transmit said at least one encryption key in a predetermined format to at least one electronic terminal"** is disclosed in '263 col. 10, lines 19-41;

**"said at least one electronic terminal includes a secure memory location for storing at least one data communications encryption key and is configured to employ said encryption key for the purpose of encrypting input data"** is taught in '263 col. 4, lines 24-29; the following is not explicitly taught in '263:

**"said predetermined format including a signal having an effective transmitting range of less than or equal to a meter"** however '671 teaches "The graphs of FIGS. 36 and 37 illustrate the advantages of the DSSS system. The first portion of the curve on FIG. 37 for a

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distance between 5 and 25 feet shows the usual falloff of signal strength obtained with a system of the prior art without using the spread spectrum signal modulation according to the invention. The curve has been normalized to show a maximum signal strength of 1.0 at 5 feet from the antenna ... Accordingly, it is very easy to discriminate between a desired signal 15 feet from the reader, and an unwanted signal, such as from an adjacent toll lane, which in most cases will be at least 25 feet away ... It is possible to tailor the distances in actual set up very accurately by locating the antenna at the desired distance from the tag even though the transmitter, receiver/detector and decoder are located somewhere else” in col. 34, line 42 through col. 35, line 13. Note since it is possible to tailor the distance in the actual set up an obvious variation would be to tailor the distance so that is equal or less than a meter;

**“said predetermined format further including a signal being transmitted from said portable keying device in a predetermined direction”** however ‘671 teaches “The information determined by the signal processor 32 is passed to a computer system comprising, among other elements, a random access memory (RAM) 34 and a microprocessor 36. This computer system analyzes the frequency, amplitude and phase information and makes decisions based upon this information” in col. 13, lines 33-42 and col. 15, line 19 through col. 16, line 3.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of ’263 a method of distributing keys to include a means for the portable keying device to utilize a RF-ID tag that is compatible with existing methods. One of ordinary skill in the art would have been motivated to perform such a modification because of the many schemes known for encoding and decoding identification signals (see ‘671 col. 1, lines 18 et seq.). “A number of different schemes are known for encoding, transmitting and decoding

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identification signals from RF-ID tags. However, these schemes are generally incompatible, therefore requiring proprietary readers to accept encoded transmissions from tags of the same vendor. Even where the transmission scheme is not proprietary, there is no standardization in the various RF-ID applications”.

**As to dependent claim 63, “wherein the communications unit includes a low power-close proximity RF transceiver”** however ‘671 teaches “It is also an object of the invention to provide a method for interrogating a backscatter generating tag, comprising the steps of (a) generating an interrogation signal having a frequency within a interrogation band; (b) emitting an interrogation signal as a radio wave signal; (interacting the emitted radio wave signal with a backscatter generating tag; (receiving a radio frequency backscatter signal from the tag” in col. 8, lines 53-67. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62.

**As to dependent claim 64, “wherein the predetermined format includes transmitting an RF signal at a predetermined power level”** however ‘671 teaches transmitting a RF signal at a specified signal strength in col. 8, lines 53-67 {Note “power level” has the same meaning as “signal strength”}. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62.

**As to dependent claim 65, “wherein the predetermined power level is less than or equal to 1mW”** however ‘671 teaches “In one embodiment, the voltage controlled oscillator 10 is controlled to produce a sinusoidal RF” in col. 14, lines 1-10. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62.

**As to dependent claim 66, “wherein the RF signal has an effective range of less than or equal to a meter”** however ‘671 teaches “The graphs of FIGS. 36 and 37 illustrate the advantages of the DSSS system. The first portion of the curve on FIG. 37 for a distance between

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5 and 25 feet shows the usual falloff of signal strength obtained with a system of the prior art without using the spread spectrum signal modulation according to the invention. The curve has been normalized to show a maximum signal strength of 1.0 at 5 feet from the antenna ...

Accordingly, it is very easy to discriminate between a desired signal 15 feet from the reader, and an unwanted signal, such as from an adjacent toll lane, which in most cases will be at least 25 feet away ... It is possible to tailor the distances in actual set up very accurately by locating the antenna at the desired distance from the tag even though the transmitter, receiver/detector and decoder are located somewhere else” in col. 34, line 42 through col. 35, line 13. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62. Note since it is possible to tailor the distance in the actual set up an obvious variation would be to tailor the distance so that is equal or less than a meter.

**As to dependent claims 67 and 69, “wherein the predetermined direction is a direction residing within a plus or minus fifteen degree angular range of a certain direction”** however ‘671 teaches “The information determined by the signal processor 32 is passed to a computer system comprising, among other elements, a random access memory (RAM) 34 and a microprocessor 36. This computer system analyzes the frequency, amplitude and phase information and makes decisions based upon this information” in col. 13, lines 33-42 and col. 15, line 19 through col. 16, line 3. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62.

**As to dependent claim 68, “wherein the predetermined format includes transmitting an RF signal having a predetermined polarity”** however ‘671 teaches the direction of the signal sent and received can be controlled in col. 18, lines 6-11. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62.

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**As to dependent claim 70, “wherein the predetermined direction is a direction residing within a plus or minus fifteen degree angular range of a central emission vector”** however ‘671 teaches “The information determined by the signal processor 32 is passed to a computer system comprising, among other elements, a random access memory (RAM) 34 and a microprocessor 36. This computer system analyzes the frequency, amplitude and phase information and makes decisions based upon this information” in col. 13, lines 33-42 and col. 15, line 19 through col. 16, line 3. The motivation to combine ‘263 and ‘671 is the same as stated above in claim 62.

**As to dependent claim 71, “wherein the at least one encryption key is installed in the electronic terminal in accordance with a predetermined protocol”** is disclosed in ‘263 col. 6, lines 47-52.

**As to independent claim 93, “A portable key installation system for installing an encryption key, the system comprising: at least one electronic terminal includes a secure memory location for storing at least one data communications encryption key and is configured to employ said encryption key for the purpose of encrypting input data”** is taught in ‘263 col. 4, lines 24-29;

**“a portable keying device including a memory adapted to store the at least one encryption key, and a device communication unit coupled to the memory device, the device communication unit being adapted to bi-directionally communicate the at least one encryption key in a predetermined format to the terminal communication unit”** is shown in ‘263 col. 10, line 54 through col. 11, line 14;

the following is not explicitly taught in ‘263:

**“said predetermined format including a signal having an effective transmitting range of less than or equal to a meter”** however ‘671 teaches “The graphs of FIGS. 36 and 37 illustrate the advantages of the DSSS system. The first portion of the curve on FIG. 37 for a distance between 5 and 25 feet shows the usual falloff of signal strength obtained with a system of the prior art without using the spread spectrum signal modulation according to the invention. The curve has been normalized to show a maximum signal strength of 1.0 at 5 feet from the antenna ... Accordingly, it is very easy to discriminate between a desired signal 15 feet from the reader, and an unwanted signal, such as from an adjacent toll lane, which in most cases will be at least 25 feet away ... It is possible to tailor the distances in actual set up very accurately by locating the antenna at the desired distance from the tag even though the transmitter, receiver/detector and decoder are located somewhere else” in col. 34, line 42 through col. 35, line 13. Note since it is possible to tailor the distance in the actual set up an obvious variation would be to tailor the distance so that is equal or less than a meter;

**“said predetermined format further including a signal being transmitted from said portable keying device in a predetermined direction”** however ‘671 teaches “The information determined by the signal processor 32 is passed to a computer system comprising, among other elements, a random access memory (RAM) 34 and a microprocessor 36. This computer system analyzes the frequency, amplitude and phase information and makes decisions based upon this information” in col. 13, lines 33-42 and col. 15, line 19 through col. 16, line 3.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of ’263 a method of distributing keys to include a means for the portable keying device to utilize a RF-ID tag that is compatible with existing methods. One of ordinary

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skill in the art would have been motivated to perform such a modification because of the many schemes known for encoding and decoding identification signals (see '671 col. 1, lines 18 et seq.). "A number of different schemes are known for encoding, transmitting and decoding identification signals from RF-ID tags. However, these schemes are generally incompatible, therefore requiring proprietary readers to accept encoded transmissions from tags of the same vendor. Even where the transmission scheme is not proprietary, there is no standardization in the various RF-ID applications".

**As to dependent claims 94 and 95**, these claims contain substantially similar subject matter to dependent claims 63 and 64; therefore they are rejected along similar rationale.

**As to dependent claim 96, "and where said portable keying device includes a display and a keyboard, said display being disposed in a first direction relative to said keyboard, is** taught in '263 col. 8, lines 42-47, col. 10, lines 2-6, and col. 10, lines 34-53;

**"and wherein said predetermined direction at which said signal is transmitted from said portable keying device is substantially the same direction as said first direction"** however '671 teaches "The information determined by the signal processor 32 is passed to a computer system comprising, among other elements, a random access memory (RAM) 34 and a microprocessor 36. This computer system analyzes the frequency, amplitude and phase information and makes decisions based upon this information" in col. 13, lines 33-42 and col. 15, line 19 through col. 16, line 3. The motivation to combine '263 and '671 is the same as stated above in claim 93.

**As to dependent claim 97, "wherein said portable keying device includes a display, and wherein said portable keying device is configured to display an error message on said**



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**display if a key transmission from said portable keying device to said at least one electronic terminal is not successful"** is taught in '263 col. 8, line 65 through col. 9, line 11.

**As to dependent claims 98-103**, these claims contain substantially similar subject matter to dependent claims 65-70; therefore they are rejected along similar rationale.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is

(571) 272-3842. The examiner can normally be reached from 9:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Ellen Tran  
Patent Examiner  
Technology Center 2134  
26 April 2007